56th Congress, 1st Session. | HOUSE OF REPRESENTATIVES. | Document No. 283.

EXAMINATION AND SURVEY OF TARRYTOWN HARBOR, NEW YORK.

LETTER

FROM

THE SECRETARY OF WAR,

TRANSMITTING,

WITH A LETTER FROM THE CHIEF OF ENGINEERS, REPORTS OF EXAMINATION AND SURVEY OF TARRYTOWN HARBOR, NEW YORK.

JANUARY 12, 1900.—Referred to the Committee on Rivers and Harbors and ordered to be printed.

War Department,
Washington, January 10, 1900.

Sir: I have the honor to transmit herewith a letter from the Chief of Engineers, United States Army, dated January 8, 1900, together with copies of reports from Col. J. W. Barlow, Corps of Engineers, dated June 16 and December 15, 1899, the former of a preliminary examination and the latter of a survey of Tarrytown Harbor, New York, made by him in compliance with the provisions of the river and harbor act of March 3, 1899.

Very respectfully,

Elihu Root,
Secretary of War.

The Speaker of the House of Representatives.

Office of the Chief of Engineers,
United States Army,
Washington, January 8, 1900.

Sir: I have the honor to submit the accompanying copies of reports dated June 16 and December 15, 1899, with map, by Col. J. W. Barlow, Corps of Engineers, upon preliminary examination and survey, respectively, of Tarrytown Harbor, New York, made to comply with the provisions of the river and harbor act of March 3, 1899.

In the opinion of Colonel Barlow the locality is worthy of improvement by the United States, and he presents a plan for improvement by dredging a channel along the wharf front and connecting it north and south with deep water in the Hudson River, the said channel to have a depth of 12 feet with a width of 150 feet along the wharf front and

HC
554
H3
N49
1900r

a width of 100 feet in the northerly and southerly connections with the Hudson. The estimated cost of this work, including contingencies, is $26,000, and $1,000 or $2,000 biennially for maintenance.

The cost of a 15-foot channel, 150 feet wide throughout, is estimated at $55,000, and $1,000 or $2,000 biennally for maintenance.

Colonel Barlow recommends that, should the project for a 12-foot channel be adopted, the amount of the estimate be appropriated in one sum, in order that the work may be completed speedily and economically.

Very respectfully, your obedient servant,

JOHN M. WILSON,
Brig. Gen., Chief of Engineers,
U. S. Army.

HON. ELIHU ROOT,
Secretary of War.

PRELIMINARY EXAMINATION OF TARRYTOWN HARBOR, NEW YORK.

UNITED STATES ENGINEER OFFICE,
New York City, June 16, 1899.

GENERAL: I have the honor to submit the following report on a preliminary examination of Tarrytown Harbor, New York, made in compliance with section 22 of the river and harbor act of March 3, 1899, and pursuant to Department letter of April 14, 1899.

Tarrytown is situated on the east bank of the Hudson River, about 28 miles from New York City, where the width of the river is several miles. The channel is bordered on both sides by extensive flats, that on the east side measuring about three-eighths of a mile from the main wharf to the 12-foot depth in the river.

An examination of this locality was made in 1888, the report on which may be found in the Report of the Chief of Engineers for 1889, page 800. At that time the harbor was not considered worthy of improvement, as the expense probably would be disproportionate to the amount of commerce to be benefited.

The general depth in the harbor is about 4½ feet at mean low water. There are, however, two channels, with a depth of about 6 feet, which lead up to the main wharf. One of the channels extends in a southwesterly direction, and is used by vessels trading with New York, and the other extends in the direction of Nyack, and is used by the ferry line running there. The steamer *Armitage Brearley*, having a draft of 6 feet 10 inches and net tonnage of 189 tons, makes three round trips a week between Tarrytown and New York, and carries during the season from 12,000 to 14,000 tons of merchandise. In addition, a daily line of steamers to Peekskill and a number of canal boats and sailing vessels carry considerable freight.

Tarrytown has now a population of about 10,000 inhabitants, and its commerce consists of coal, building material, general merchandise, and farm products. Considerable property is available for manufacturing purposes, but no concerns will establish themselves there until the depth in the harbor has been increased. The improvement desired consists in dredging a channel from 100 to 150 feet wide and from 10 to 12 feet deep along the wharf front and connecting it north and south with the deep water in the Hudson.

I am of the opinion that Tarrytown Harbor is worthy of improvement by the General Government, provided the work can be done at a cost commensurate with the present and prospective commerce, and respectfully recommend that a survey be made, at a cost of $100, on which to base a project and estimate.

Very respectfully, your obedient servant,

J. W. BARLOW,
Colonel, Corps of Engineers.

Brig. Gen. JOHN M. WILSON,
Chief of Engineers, U. S. A.

[First indorsement.]

OFFICE CHIEF OF ENGINEERS,
U. S. ARMY,
August 14, 1899.

Respectfully submitted to the Secretary of War.

In accordance with the provisions of the river and harbor act of March 3, 1899, a preliminary examination has been made of Tarrytown Harbor, New York.

The locality is reported to be worthy of improvement, provided the work can be done at a cost commensurate with the commerce involved, and I recommend that a survey be made, after which a more reliable opinion can be formed as to the scope of improvement justified.

A. MACKENZIE,
Acting Chief of Engineers.

WAR DEPARTMENT,
August 15, 1899.

Approved as recommended by the Acting Chief of Engineers.

By order of the Secretary of War:

JOHN C. SCOFIELD,
Chief Clerk.

SURVEY OF TARRYTOWN HARBOR, NEW YORK.

UNITED STATES ENGINEER OFFICE,
New York City, December 15, 1899.

GENERAL: I have the honor to submit the following report on the survey of Tarrytown Harbor, New York, as provided for in river and harbor act of March 3, 1899, and which was assigned to my charge by Department letter of August 18, 1899.

The report on the preliminary examination of this harbor was submitted June 16, 1899, to which attention is invited.

The present survey was made from November 7 to 9, 1899, by Mr. H. C. Wilson, assistant engineer, whose report is transmitted herewith.

The proposed project for this harbor consists in dredging a channel along the wharf front and connecting it north and south with the deep water in the Hudson.

For the present needs of commerce the channel should be 12 feet deep, with a width of 150 feet along the wharf front and a width of

100 feet in the northerly and southerly connections with the Hudson River channel.

The estimated cost of a 12-foot channel of the above dimensions is as follows:

Dredging 152,222 cubic yards of material, at 16 cents	$24,355.52
Add for engineering expenses, contingencies, etc	1,644.48
Total	26,000.00

To this must be added the cost of maintenance, which is estimated at from $1,000 to $2,000 biennially.

If at any future time the commerce should increase so much that a channel of the above dimensions was insufficient, the width could be increased to 150 feet and the depth to 15 feet throughout. The cost of this additional work would be as follows:

Dredging 168,912 cubic yards of material, at 16 cents	$27,025.92
Add for engineering expenses, contingencies, etc	1,974.08
Total	29,000.00

The estimated cost, therefore, of a 15-foot channel 150 feet wide is $55,000, to which should be added the cost of maintenance, estimated at from $1,000 to $2,000 biennially.

Should the project for a 12-foot channel be adopted, it is recommended that the amount be appropriated in one sum, in order that the work may be completed speedily and economically. The cost of dredging will probably be much higher than estimated if the work is done by piecemeal.

The amount of commerce of Tarrytown Harbor seems quite extensive, and has every prospect of increasing rapidly if the proposed improvement is carried out. A full statement of this commerce is given in the report herewith.

A map of the harbor accompanies this report, on which the proposed channel has been indicated by broken lines.

Very respectfully, your obedient servant,

J. W. BARLOW,
Colonel, Corps of Engineers.

Brig. Gen. JOHN M. WILSON,
Chief of Engineers, U. S. A.

REPORT OF MR. H. C. WILSON, ASSISTANT ENGINEER.

NEW YORK CITY, *December 13, 1899.*

COLONEL: I have the honor to submit the following report upon a survey of Tarrytown Harbor, New York, made, in accordance with your instructions, from November 7 to 9, the object being to obtain sufficient data from which to prepare a project and estimate of cost of the improvement of the harbor:

Tarrytown is situated on the east bank of the Hudson, about 25 miles above New York City, where it is cut off from the deep water of the river by a submerged flat about three-eighths of a mile in width.

An accurate survey of the village water front having been made under the direction of the village authorities by Mr. Eberhard J. Wolff, civil engineer, during the month of June, 1894, it was considered unnecessary to resurvey that portion of the harbor, so the work was confined to carefully sounding the section of the river between the wharf and the 18-foot contour of the Hudson.

Thirty-three lines of soundings were taken, about normal to the shore, of which every other sounding was located by means of two transits placed at Shinders's and Archbold's docks. These soundings, upon being plotted, showed that the depth along the wharf front varied from 4 to 6 feet, and that there was a very gradual increase in depth from the wharfs to the 9-foot contour of the Hudson, where the depth begins to increase more rapidly.

A number of borings were made for the purpose of determining the character of the bottom. This was found to be principally mud, except in the vicinity of Husted's Dock, where some gravel and hardpan were found.

The river commerce of Tarrytown is principally carried on with New York City. Between these points a steam propeller, the *Armitage Brearley*, makes triweekly trips. This boat draws 7 feet of water and has a gross tonnage of 237.31 and a net tonnage of 189.84 tons. A ferry line is also operated between Tarrytown and Nyack, where it connects with the steamboat *Chrystenah*, of the North River Steamboat Company, which plies between Peekskill and New York. This steamboat is prevented from landing at Tarrytown by the shoal condition of the harbor.

Most of the commerce by water is carried by canal boats and small sailing vessels, and consists principally of coal, building material, and general merchandise.

The following statement of the amount of commerce brought to and taken from Tarrytown by water during the past year was procured from the owners of the different docks, and is believed to be reasonably accurate:

Coal	tons	20,000
Lumber	M feet B. M.	1,330
Laths	bundles	11,000
Shingles	do	2,000
Cement, lime, and plaster	tons	775
Bluestone	do	500
Paving stone	do	200
Gravel	cubic yards	3,000
Wood	cords	200
General merchandise	tons	20,000

The ferry company reports that 15,000 passengers were carried each way between Tarrytown and Nyack.

One of the principal industries of Tarrytown is the Rand Drill Works. This company reports that about 2,500 tons of machinery and supplies are received annually, and that their shipments amount to about the same number of tons. This freight is, however, handled by railroad, owing to the insufficient depth of water in the harbor. An automobile factory has lately been established at Kingslands Point, where it is expected a large business will be carried on.

In the event of the improvement of Tarrytown Harbor, private enterprise proposes to build a causeway between the Rand Drill Works and Kingslands Point, and then have the shoal body of water behind it filled in, leaving a proper outlet for Pocantico River.

I was informed that inducements were being offered to shipbuilders and manufacturers to locate at Tarrytown should the improvement of the harbor be undertaken by the Government.

The problem at Tarrytown is very similar to that at Peekskill, where a channel was dredged along the wharf front and then connected north and south with the deep water of the Hudson. This plan having proved so successful there, a like one is proposed for Tarrytown. Before, however, determining the width and depth of the proposed channel, inquiry was made as to the dimensions that would probably be required by commerce. As a result of this inquiry, it was ascertained that the channel, to be of any practical use, should be at least 100 feet wide and 11 feet deep at low water.

The channel as laid down on the accompanying map is the one which is respectfully recommended for adoption. It has a width of 150 feet between Husted's and Shinders's docks, and is connected north and south with the Hudson by channels 100 feet wide, the depth throughout to be 12 feet at mean low water.

The following is an estimate of the cost of securing such a channel:

Dredging 152,222 cubic yards of material, at 16 cents	$24,355.52
Add for engineering expenses, contingencies, etc	1,644.48
Total	26,000.00

Should the amount of commerce at any future time warrant it, the channel could be made a uniform width of 150 feet, with a depth of 15 feet at mean low water. The estimated cost of this channel is as follows:

Dredging 321,134 cubic yards of material, at 16 cents	$51,381.44
Add for engineering expenses, contingencies, etc	3,618.56
Total	55,000.00

Should the proposed improvement be made a large saving in freight would be effected, owing to the increased size of vessels that could land at the docks. The North River Steamboat Company have also stated that, if the amount of traffic warranted it, the *Chrystenah* would land regularly at Tarrytown, thereby doing away with the necessity of ferrying passengers to and from Nyack.

Very respectfully,

H. C. Wilson,
Assistant Engineer.

Col. J. W. Barlow,
Corps of Engineers.

O

Avery Architectural and Fine Arts Library
Gift of Seymour B. Durst Old York Library

Tarrytown Harbor, N.Y.

Surveyed under the direction of Colonel T. W. Barlow, Corps of Engineers, U.S.A.
H. C. Wilson, Ass't Engineer — S. E. Vossler, Surveyor.
November 7-9, 1899.

Scale = 1:2400.

Notes

Soundings are expressed in feet and refer to the plane of mean low water.

The mean rise and fall of tides is 3.5 feet.

The 6 feet contour is shown thus: —·· —·· —
" 9 " " " " " - - - - - - - - -
" 12 " " " " " — — —·—·—
" 15 " " " " " ————————
" 18 " " " " " —··—··—
The boundaries of grants of lands under water are shown thus: —··—··—

The proposed channel is shown thus: — — — — — —

New York, N.Y. Dec 15, 1899
Respectfully forwarded to the Chief of Engineers, U.S. Army with report of this date.
T. W. Barlow
Colonel, Corps of Engineers.

A. B. Graham Photo Lith. Washington D.C.

OYL 2908 BOV92